

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended) A mobile communication system comprising:

a base station;

a mobile station having ~~either one of or both of~~ an individual channel set to said base station, and a shared channel set to said base station shared with other mobile stations for transmitting data from said base station; and

a transmission power control device for controlling a sum of transmission powers from said base station to said mobile stations to be approximately constant.

2. (original) The mobile communication system according to claim 1, wherein said transmission power control device maintains a sum of transmission powers for said shared channel, and for said individual channels at said constant power.

3. (original) The mobile communication system according to claim 1, wherein said transmission power control device sets the transmission power for said shared channel to said constant power when there exists no individual channel.

4. (original) The mobile communication system according to claim 1, wherein said transmission power control device respectively increases/decreases the transmission power for said shared channel according to an increased/decreased transmission power because of an increase/decrease of said individual channels.

5. (original) The mobile communication system according to claim 4, wherein said transmission power control device respectively increases/decreases the transmission power for said shared channel by an average transmission power of the individual channels for an increase/decrease of one individual channel.

6. (original) The mobile communication system according to claim 1, wherein if the sum of said transmission powers is larger than an upper limit, said transmission power control device decreases the transmission power for said shared channel by a difference between said sum and said upper limit.

7. (original) The mobile communication system according to claim 1, wherein if the sum of said transmission powers is lower than a lower limit, said transmission power control device increases the transmission power for said shared channel by a difference between said sum and said lower limit.

8. (original) The mobile communication system according to claim 1, wherein said transmission power control device is provided in said base station.

9. (original) The mobile communication system according to claim 1, further comprising a base station control station for controlling said base station, wherein said base station reports information for said transmission power control to said base station control station, and said base station control station notifies setting information on the transmission power for said shared channel based on the reported information.

10. (currently amended) A transmission power control method for a base station of a mobile communication system including a base station, and a mobile station having ~~either one of~~ ~~or both of~~ an individual channel set to said base station, and a shared channel set to said base station shared with other mobile stations for transmitting data from said base station, said method comprising,
a transmission power control step for controlling a sum of transmission powers from said base station to said mobile stations to be approximately constant.

11. (original) The transmission power control method according to claim 10 wherein said transmission power control step maintains a sum of transmission powers for said shared channel, and for said individual channels at said constant power.

12. (original) The transmission power control method according to claim 10, wherein said transmission power control step sets the transmission power for said shared channel to said constant power when there exists no individual channel.

13. (original) The transmission power control method according to claim 10, wherein said transmission power control step respectively increases/decreases the transmission power for said shared channel according to an increased/decreased transmission power because of an increase/decrease of said individual channels.

14. (original) The transmission power control method according to claim 13, wherein said transmission power control step respectively increases/decreases the transmission power for said shared channel by an average transmission power of the individual channels for an increase/decrease of one individual channel.

15. (original) The transmission power control method according to claim 10, wherein if the sum of said transmission powers is larger than an upper limit, said transmission power control step decreases the transmission power for said shared channel by a difference between said sum and said upper limit.

16. (original) The transmission power control method according to claim 10, wherein if the sum of said transmission powers is lower than a lower limit, said transmission power control

step increases the transmission power for said shared channel by a difference between said sum and said lower limit.

17. (original) The transmission power control method according to claim 10, wherein said transmission power control step is conducted in said base station.

18. (original) The transmission power control method according to claim 10, wherein the mobile communication system further comprises a base station control station for controlling said base station, further comprising steps of:

reporting information for said transmission power control to said base station control station in said base station;

notifying setting information on the transmission power for said shared channel based on the reported information in said base station control station; and

conducting said transmission power control according to this notified information in said base station.

19. (currently amended) A base station for setting ~~either one of or both of~~ an individual channel with a mobile station and a shared channel shared with other mobile stations for transmitting data from the mobile station, comprising;

a transmission power control device for controlling a sum of said transmission powers to said mobile stations to be approximately constant.

20. (original) The base station according to claim 19, wherein said transmission power control device maintains a sum of transmission powers for said shared channel, and for said individual channels at said constant power.

21. (original) The base station according to claim 19, wherein said transmission power control device sets the transmission power for said shared channel to said constant power when there exists no individual channel.

22. (original) The base station according to claim 19, wherein said transmission power control device respectively increases/decreases the transmission power for said shared channel according to an increased/decreased transmission power because of an increase/decrease of said individual channels.

23. (original) The base station according to claim 22, wherein said transmission power control device respectively increases/decreases the transmission power for said shared channel by an average transmission power of the individual channels for an increase/decrease of one individual channel.

24. (original) The base station according to claim 19, wherein if the sum of said transmission powers is larger than an upper limit, said transmission power control device

decreases the transmission power for said shared channel by a difference between said sum and said upper limit.

25. (original) The base station according to any one of claim 19, wherein if the sum of said transmission powers is lower than a lower limit, said transmission power control device increases the transmission power for said shared channel by a difference between said sum and the lower limit.

26. (currently amended) A program for making a computer execute a process for a transmission power control method for a base station of a mobile communication system including a base station, and a mobile station having ~~either one of or both of~~ an individual channel set to said base station, and a shared channel set to said base station shared with other mobile stations for transmitting data from said base station comprising a transmission power control step for controlling a sum of transmission powers from said base station to said mobile stations to be approximately constant.

27. (original) The program according to claim 26, wherein said transmission power control step maintains a sum of transmission powers for said shared channel, and for said individual channels at said constant power.

28. (original) The program according to claim 26, wherein said transmission power control step sets the transmission power for said shared channel to said constant power when there exists no individual channel.

29. (original) The program according to claim 26, wherein said transmission power control step respectively increases/decreases the transmission power for said shared channel according to an increased/decreased transmission power because of an increase/decrease of said individual channels.

30. (original) The program according to claim 29, wherein said transmission power control step respectively increases/decreases the transmission power for said shared channel by an average transmission power of the individual channels for an increase/decrease of one individual channel.

31. (original) The program according to claim 26, wherein if the sum of said transmission powers is larger than an upper limit, said transmission power control step decreases the transmission power for said shared channel by a difference between said sum and said upper limit.

32. (original) The program according to claim 26, wherein if the sum of said transmission powers is lower than a lower limit, said transmission power control step increases the

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transmission power for said shared channel by a difference between said sum and said lower
limit.